

REMARKS

Reconsideration of the patentability of all of the pending claims of the above referenced patent application is solicited.

In the outstanding action, the examiner has objected to the response filed December 12, 2005 based on the allegation that there was no specific discussion of how at least claim 9 was distinguished from the state of the prior art and particularly how it was distinguished from the disclosure of the '595 patent. Indeed, the examiner substantially repeats himself stating, "A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguished them from the references does not comply with the requirements of this section" (allegedly referring to 37 CFR 1.111(b)). This position of the examiner is respectfully traversed.

Claim 9 provides for the instant claimed pipe to be made up of an inner tubular member and a hollow outer tubular member with a plurality of spaced apart rib members disposed between the inner and outer tubular members such that the combination of next adjacent rib members and their intercepted portions of the inner and outer tubular members form hollow cells. To the contrary, the reference discloses a pair of longitudinal half pipes each of which is made up of an inner member 33, an outer member 29, ribs (unnumbered) disposed between the inner member and the outer member and foam 36 disposed in the cells formed by the combination of next adjacent rib members and the portions of the inner and outer half pipes. There is no disclosure in the reference of a hollow inner tubular member and a hollow outer tubular member spaced apart from the inner tubular member which, in combination with the aforesaid ribs, forms a plurality of hollow spaces defined by next adjacent rib members and the portions of the inner and outer tubular members intercepted by the ribs.

It is important to note that in the reference, each half pipe is separately constructed such that an inner half pipe is spaced from and joined to an outer half pipe. A plurality of ribs is disposed between this inner and outer half pipe and the space between the inner and outer tubular members and between adjacent ribs is filled with foam. Therefore before the two half pipes are

longitudinally joined to make a "whole pipe", there is no hollow location between the smaller diameter and the larger diameter half pipes regardless whether there are ribs present or not. Similarly, since the space between the smaller diameter half pipe and the larger diameter half pipe is filled with foam before the two half pipes are longitudinally joined together, at no time is there a pair of radially spaced apart tubes that is hollow between the tubes as is required by the claims of this application.

Even though it should be clear to the examiner that merely comparing the above aspects of the disclosure of the reference with the requirements of the instant claims, particularly claim 9, supports the patentability of the instant claims over the prior art, these aspects do not even touch on the most important fundamental difference between the instant claimed invention and the structure shown in the prior art. The most important distinction between the structure disclosed by the reference and the structure defined in instant claim 9 (and indeed all of the claims of this application) is in the structure of the male and female end elements of the instant hollow tubular article.

It is true that the reference shows male and female end structures that are adapted to nest and thereby join separate lengths of pipe. As shown in the reference, the male end element 41 has a smaller outside diameter than the remainder of the disclosed tubular object and an inside diameter that is the same as the inside diameter of the remainder of the tubular object. The female end element has the same outside diameter as the remainder of the disclosed tubular object and an inside diameter that is larger than the inside diameter of the remainder of the tubular object. In fact, the inside diameter of the female end element is intended to be substantially the same as the outside diameter of the male end element. It will be appreciated that any type of bayonet end coupling structure will have this arrangement of parts. That structure itself is very old and very well known in the pipe art, and does not serve to distinguish either the structure of the reference or the instant claimed structure from the rest of the prior art.

In the reference, the end elements have the same bulk density as the remainder of the pipe. That is, the male end element is made up of the inside tubular article, the same foam that is in the remainder of the pipe, and an outside element that is shown to be similar, if not identical,

to the outside tubular article. That is, the female end element is made up of the outside tubular article, the same foam that is in the remainder of the pipe, and an inside element that is shown to be similar, if not identical, to the inside tubular article. There is no compression of any element of the pipe structure in forming the male or female end elements. Note the second full paragraph on page 4 of the supplemental response filed December 12, 2005. It very clearly and specifically requires that the end of the length of pipe and a portion of the pipe proximate to the end consists of a single compressed wall member comprising the amount of the inner tubular element, the outer tubular element and the enclosed rib elements. It should be clear to anyone that the structure of the male and female end elements of the instant claimed invention are structurally quite different from the "corresponding" male and female end elements of the reference.

According to claim 9, the male and female end joints are made up of an amount of material that is equivalent to the amount of material that would have made up the inner tubular member, the outer tubular member and the ribs that would otherwise have been part of the hollow pipe structure. Thus, the bulk density of the end joints will necessarily be greater than the bulk density of the remainder of the pipe material. To the contrary, the reference shows male and female end joints made up of a portion of the inner or outer tubular material as well as some foam material. The bulk density of the end joints of the reference will be the same as the bulk density of the rest of the dual walled structure shown therein.

Importantly, the reference shows a structure that has male and female mating end couples and also male and female longitudinal couples. In the instant claimed structure the pipe is longitudinally seamless. Indeed, it is preferably made by a single extrusion such that the pipe length is a single integral whole, not a pair of longitudinal half pipes that have been longitudinally joined together as is disclosed and required by the reference.

To sum up:

the instant claimed pipe has a portion of its length in which there is substantial hollow space disposed between the inner tubular member and the outer tubular member and a portion of the ends of the pipe in which there is no, or at most very little, hollow space because the structural elements of the pipe have been collapsed into a solid single wall structure; whereas in

the reference all of the space between the inner and outer tubular members of each portion of the unassembled pipe is initially (that is prior to longitudinal assembly into a pipe structure) empty and then filled with foam before being longitudinally assembled into a pipe structure. Although the disassembled portions of the pipe of the reference may have had hollow space between the larger diameter and smaller diameter half pipes at some time before assembly, there is simply no disclosure in the reference of the **whole pipe** (that is the longitudinally assembled pipe) of the reference having any hollow space between the inner and outer tubular members. This is a required element of the instant invention.;

the instant claimed pipes are longitudinally seamless, whereas the pipe of the reference has two longitudinal seams;

the male and female end elements of the instant claimed pipes have no empty space in them (that is no room to be filled with foam) as is disclosed and required by the reference; and

the male and female couplings of the instant invention have a higher bulk density than do the end couples of the reference because the instant end couples are material made up of the solid elements of the instant claimed pipe that have been compressed together, whereby excluding the gas filled hollow portions of the pipe; whereas the reference discloses the end elements to be made up of the same inner and outer pipe members and foam as the rest of the pipe. The reference does not disclose any compression or any other change in the bulk density of the end elements. Thus the characterization of the instant end elements as having a higher bulk density than the remainder of the pipe structure is a clear and unmistakable patentable differentiation between the instant claimed structure and the structure of the reference.

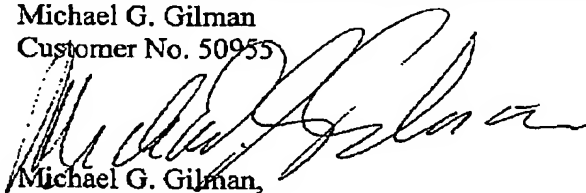
The examiner's attention is directed to the paragraph bridging pages 7 and 8 of the supplemental response filed December 12, 2005 and to the paragraphs following this paragraph. It is clear that these paragraphs amply argue the patentability of applicant's claims by pointing out specific instances where the instant claims define required structure that is not disclosed in the reference. It is urged that the examiner reconsider his position on the point of whether the responses filed in September and December of 2005 are fully and completely responsive to the rejections asserted by the examiner. It is believed that the examiner is incorrect in the assertions that he has made that applicant's responses were not completely within the purview of the

requirements of 37 CFR 1.111(b). Such assertions should be withdrawn insofar as they could possibly incorrectly taint the patentability of the instant claimed invention.

It is therefore urged that the examiner find all of the claims to be allowable. In the event that the examiner does not find the claims of this application to be allowable, he is requested to telephone the undersigned attorney to discuss exactly what portion of the reference he believes discloses the structure of the product being claimed herein.

Respectfully submitted:

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